a liquid medium in which the  $\underline{\mathtt{B}}$  cell is immersed, the liquid medium receiving the antigen to be detected; and an optical detector arranged for receiving the photon emitted from the cell.

- 2. (Amended) The device of claim 1, further comprising a covering [for supporting] for the detector, the covering separating the liquid medium from the detector.
- 4. (Amended) The device of claim 1, further comprising a housing enclosing the liquid medium.
- 5. (Amended) A device for detecting the presence of an antigen, comprising:
- a <u>B</u> cell having antibodies which are expressed on the surface of the <u>B</u> cell and are specific for the antigen to be detected, wherein binding of the antigen to the antibodies results in an increase in calcium concentration in the cytosol of the <u>B</u> cell, the <u>B</u> cell further having an emitter molecule which, in response to the increased calcium concentration, emits a photon;
- a liquid medium in which the  $\underline{B}$  cell is immersed; and an optical detector arranged for receiving the photon emitted from the  $\underline{B}$  cell, wherein the optical detector is [affixed] adjacent to the liquid medium [containing the cells].

